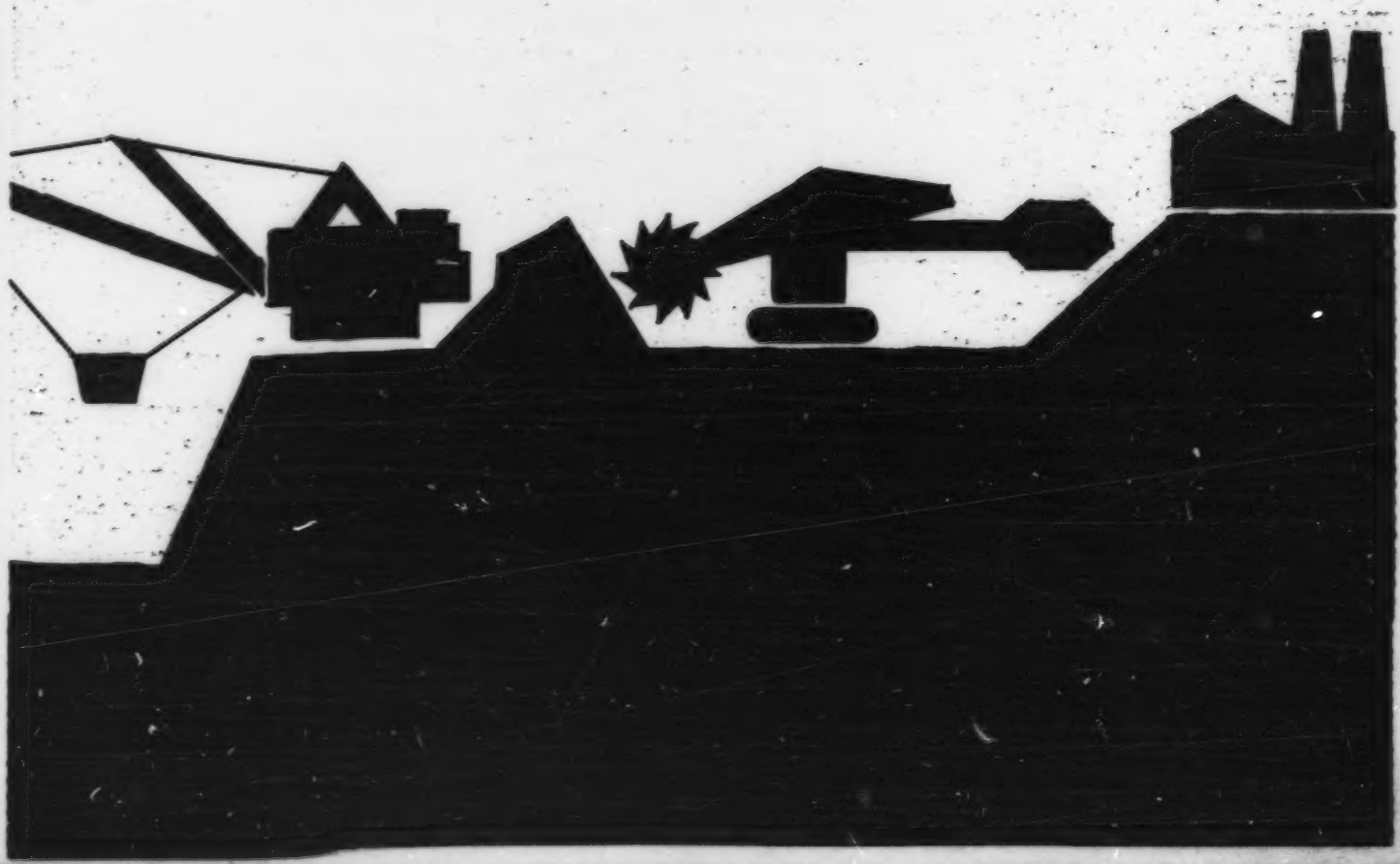
Alberta Oil Sands Equity
Annual Report
1989 - 1990



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Alberta

OIL SANDS EQUITY

Alberta Oil Sands Equity

Partnership and Progress in Alberta's Oil Sands Development

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Alberta

ENERGY

Office of the Minister

228 Legislature Building, Edmonton, Alberta, Canada T5K 2B6 403/427-3740

The Honourable Gordon Towers
Lieutenant Governor of Alberta
3rd Floor, Legislature Building
Edmonton, Alberta

Your Honour:

I have the honour to present the annual report of Alberta Oil Sands Equity for the year ended March 31, 1990.

Respectfully submitted

Rick Orman
Minister of Energy

Alberta

OIL SANDS EQUITY

11th Floor, Petroleum Plaza, 9945 - 108 Street, Edmonton, Alberta, Canada T5K 2G6 403/427-2492

The Honourable Rick Orman
Minister of Energy
228 Legislature Building
Edmonton, Alberta
T5K 2B6

Sir:

I am pleased to submit the annual report of Alberta Oil Sands Equity for the year ended March 31, 1990.

Respectfully submitted

T.R. Vant
Chairman

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Minister's Message

Alberta is fortunate to have more than 40% of the world's reserves of heavy oil and oil sands. With conventional oil reserves declining, oil sands and heavy oil represent the future for Canada's energy industry. The development of these reserves is a matter of national importance if energy supplies are to be ensured, and the high risk of dependence on other nations is to be avoided. The oil sands and heavy oil deposits are a known resource, technology is available to tap them, and new lower-cost technology is being developed.

The Government of Alberta has been an integral partner in the province's oil sands development for more than 70 years — beginning with the Alberta Research Council's pioneering work in the development of the Clark Hot Water Extraction Process and continuing today through direct research, joint government/industry research and development projects, and through equity ownership.

Alberta, through Alberta Oil Sands Equity, has been an equity participant in the oil sands for more than 15 years. Investment by Alberta has been the catalyst which has moved the Syncrude Project and the Lloydminster Bi-Provincial Upgrader project forward; and it has moved the OSLO Commercial Project and the OSLO New Ventures Project to their present stage of development.

Alberta Oil Sands Equity is a key vehicle by which Alberta is investing in the future of our province and its efforts over the past 15 years have contributed significantly to the development of the province's oil sands. This report tells a positive story - of direct permanent employment created, of profits returned to the Alberta Heritage Savings Trust Fund, and of exciting advances in technology and technical expertise.

Rick Orman
Minister of Energy

Chairman's Message

Alberta has reaped many benefits from oil sands development and its exciting technology and the future promises continued benefits for Alberta and for Canada. Alberta Oil Sands Equity is proud to be a partner in this progress.

Alberta's equity participation in oil sands projects represents both the present and the future. Through Alberta Oil Sands Equity's management of the province's financial investment in oil sands projects, Alberta is signalling that it is prepared to be a leader in securing a reliable energy supply for today and for tomorrow.

More than two decades of Alberta experience and success in the production of synthetic crude oil from oil sands deposits have demonstrated how industry and government can work together cooperatively and effectively. We have done it with Syncrude and we are doing it with OSLO and the Lloydminster Bi-Provincial Upgrader.

Oil sands development continues to afford opportunities for progress through the development of new technologies, employment, innovative engineering and construction methods, and increased environmental planning and protection. We think we have an interesting story to share and we hope you will agree.

T.R. Vant
Chairman

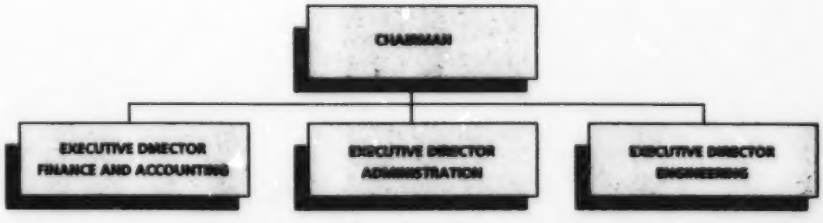
The Government of Alberta has been an equity owner in the oil sands for approximately 15 years. Alberta Oil Sands Equity, an unincorporated agency which reports to the Minister of Energy, the Honourable Rick Orman, manages the Government of Alberta's equity investments in oil sands and heavy oil projects. Funding for these investments is provided by the Alberta Heritage Savings Trust Fund.

The Heritage Fund was created in 1976 during a time of rapidly increasing provincial revenues from the sale of non-renewable resources. The Heritage Fund has three basic objectives — to save for the future, to strengthen and diversify Alberta's economy, and to improve the quality of life in Alberta. The Fund received 30% of the Province's resource revenues until 1983-84, when the rate was reduced to 15%; this transfer was suspended in 1987. Heritage Fund income was retained in the Fund until 1982, when the income transfer to support programs and services was commenced. The Heritage Fund has provided over $12 billion of income to support budgetary programs, and at December 31, 1990 it held over $12.1 billion of financial assets.

Alberta Oil Sands Equity is proud of its role in helping manage Alberta's resource investments on behalf of the Alberta Heritage Savings Trust Fund.

Alberta Oil Sands Equity is headed by the Chairman, Mr. Thomas R. Vant, with three executive directors reporting to him. Alberta Oil Sands Equity's philosophy is to maintain a core group of skilled personnel and to make use of specialized consultants and other professionals as required. Mr. Vant is also Chairman of the Board of Directors of Syncrude Canada Ltd., and is the Alberta Government's representative on the Lloydminster Bi-Provincial Upgrader Joint Venture Board, the OSLO Management Committees, and the Northward Developments Ltd. Board of Directors. The Executive Directors and Directors are members of owner subcommittees which support the work of these committees. Alberta Oil Sands Equity's annual expenditures during the 1989-90 fiscal year were $1.6 million.

Alberta Oil Sands Equity Organization Chart



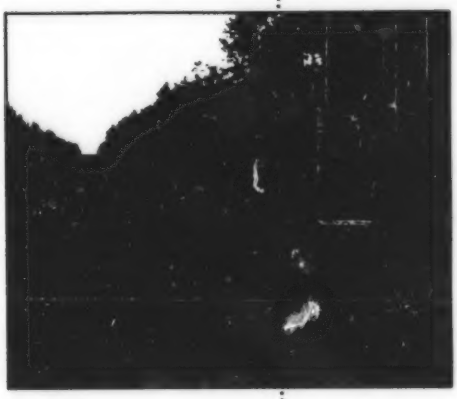
5 Alberta Oil Sands Equity: A History of Partnership in Progress

Alberta Oil Sands Equity dates back to 1974 when the Government of Alberta became involved in the Syncrude Project. From this beginning, Alberta Oil Sands Equity has expanded its activities to include the management of Alberta's equity participation and investment in the OSLO Commercial Project, the OSLO New Ventures Project, and the Lloydminster Bi-Provincial Upgrader.

Late in 1974, following completion of the design phase of the Syncrude Project, Atlantic Richfield Canada Ltd. (ARCAN) withdrew from the project due to substantially higher cost estimates and other heavy financial commitments. The Government of Alberta commissioned a major review of the project and reached the following conclusions: that costs had not been overstated, that cancellation of the project would have a major impact on the economy and that there was potential for substantial royalty revenue from the project. When additional private sector participants did not materialize, the Governments of Canada, Alberta, and Ontario met with the three remaining owners, Imperial Oil, Gulf Oil, and Canada-Cities Service; Syncrude's ownership was restructured and the project was once again on target.

Alberta agreed to take a 10% equity interest in the project and to assume responsibility for the Utilities Plant and the Synthetic Crude Pipeline. Alberta also agreed to lend $100 million to each of Gulf and Canada-Cities. These loans contained an option which allowed them to be converted into equity in the project. Alberta also retained an option to increase its equity share by between five and 20% of the project. Since that original agreement, the Syncrude Project ownership distribution has changed in several ways. In 1979, Alberta's option was exercised by Alberta Energy Company Ltd., which purchased a full 20% equity share in the Syncrude Project and subsequently sold 10% to reduce its share to the current 10%. In 1982, Alberta exercised its debenture option and converted the Gulf and Canada-Cities debentures into an additional equity percentage of 8.74%. This brought the province's total equity participation in the Syncrude Project to its current 16.74%.

OSLO (Other Six Leases Operation) is an acronym referring to the other six leases owned by the original Syncrude participants in addition to the two leases which are part of the Syncrude Project. When Syncrude was restructured, it was agreed that if ARCAN's interest in the six leases was purchased, the three governments would be allowed to obtain the same interest in these leases as they held



in the Syncrude Project. In 1976 when Petro-Canada acquired ARCAN's interest in these leases, the appropriate share in the leases was transferred to the Governments of Alberta and Ontario.

In 1981, the six OSLO owners signed the Other Six Leases Operating Agreement which kicked off an exploration and development program on the six leases. The program had three phases: resource evaluation, commercial definition, and new technology. From 1981 to 1988, more than $30 million was invested in resource evaluation programs, and a wide variety of scoping studies. A result of the program was the discovery of a promising deposit located on the north end of Lease 31, about 60 kilometres north of Fort McMurray. This ore body contains more than 3 billion barrels of high quality surface mineable bitumen.

The OSLO owners decided to separate the program into two sections. One section would deal with the commercial development of the promising deposit and the other would deal with exploration and development of the remaining leases.

A Statement of Principles covering fiscal arrangements for the OSLO Commercial Project was signed by the owners and the Governments of Alberta and Canada in September, 1988. Work on detailed arrangements continued until February, 1990, when the Government of Canada withdrew its funding commitment for construction of the project. The federal government did agree to fund the pre-appropriation phase. The Government of Alberta's commitment to the pre-appropriation phase of the project continued. Negotiations on the fiscal terms for the construction phase of the project are continuing between the owners and the Government of Alberta.

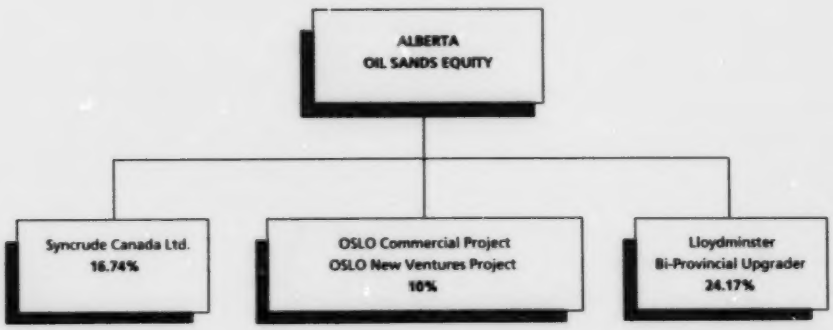
In September, 1988 the Governments of Canada, Alberta, and Saskatchewan, and Husky Oil Operations Ltd., agreed to finance, build and operate a heavy oil upgrader near Lloydminster. Alberta's equity share in this project is 24.17% — the project's start-up is set for November, 1992.

7 Alberta Oil Sands Equity: Partners in Financing and Ownership

Alberta Oil Sands Equity is a 16.74% participant in the Syncrude Project; a 10% participant in the OSLO Commercial Project and the OSLO New Ventures Project; and a 24.17% participant in the Lloydminster Bi-Provincial Upgrader.

Operating funds for Alberta Oil Sands Equity are provided from the General Revenue Fund through the usual government budgetary process. At the end of the fiscal year, administrative costs associated with the management of the Syncrude Project, the OSLO Commercial Project, and the Lloydminster Bi-Provincial Upgrader are billed to the Alberta Heritage Savings Trust Fund. Funds to meet Alberta's commitments to the Syncrude Project, the OSLO Commercial Project, and the Lloydminster Bi-Provincial Upgrader are provided directly from the Alberta Heritage Savings Trust Fund. Similarly, money received from the sale of synthetic crude oil and sulphur is returned directly to the Heritage Savings Trust Fund. The OSLO New Ventures Project is funded from general revenues through the budgetary process.

Alberta Oil Sands Equity Holdings



Syncrude Project

The Syncrude Project, located 40 kilometres north of Fort McMurray, is the world's largest oil sands operation, producing more than 10% of Canada's total crude oil requirements.

The Project has a significant impact on Alberta and on Canada. The original total investment in the Syncrude plant was $2.3 billion and since 1978 there has been a further $2 billion in capital invested. Syncrude provides direct employment for 4,600 employees and another 1,500 contract staff. The Project generates 16,000 direct and indirect jobs annually in Canada and $1 billion annually in spending to the Canadian economy. Syncrude is the largest private sector employer in Alberta and is also the largest private sector employer of native peoples in the country.

Syncrude Ownership

Canadian Occidental Petroleum Ltd.	7.23%
Alberta Energy Company Ltd.	10.00%
Alberta Oil Sands Equity	16.74%
Esso Resources Canada Limited	25.00%

Alberta's 16.74%equity investment in Syncrude yielded a $22.5 million profit for the 1989-90 fiscal year, compared to a $3.1 million loss the previous year. The profit was the result of higher prices, which averaged $23 per barrel, a $4 per barrel rise over 1988-89 levels. Total profits for Alberta's equity investment since the Project started operating in 1978 to the end of March, 1990 were $435.6 million. Royalties for the same period were $1.06 billion. The Alberta Heritage Savings Trust Fund investment in the Syncrude Project at March 31, 1990 was $518.8 million

The Project has produced more than 500 million barrels of synthetic crude oil since production began in 1978. During the 1989-90 fiscal year, Syncrude produced 51.3 million barrels of synthetic crude, as compared to 54.4 million barrels in 1988-89. Reduced production was the result of an explosion and fire and the subsequent three-month shutdown of one of the two gas oil hydrotreaters in December, 1989.

Production for the calendar year 1990 was 57.1 million barrels, an increase of 3 million barrels over 1989. Production for the 1991 calendar year is expected to rise to 62 million barrels. Increased production will lower Syncrude's direct operating costs, which were $17.41 per barrel in 1990, and are forecast to be

slightly over $16 per barrel in 1991. Syncrude is an Alberta success story. While the Project's production is rising, unit costs are being reduced, and benefits are accruing to local, provincial, and national economies.

Syncrude continues to pay close attention to the environment. Syncrude has had an environmental program in place since its beginning, starting with research efforts in 1969. The company monitored its site construction impact and continues to monitor all aspects of its operations. Syncrude's greenhouses produce thousands of seedlings for reclamation each year. Since plant start-up in 1978, Syncrude's owners have spent more than $100 million on environmental control technology and reclamation activities.

As provincial, national,and world energy needs increase, Syncrude is well poised to ensure that it is at the forefront of progress.

Syncrude Operations 1985-1990

	1985	1986	1987	1988	1989	1990
Operating Costs ($M)	832.1	709.8	738.8	813.5	927.4	994.0
Capital Costs ($M)	356.2	270.3	243.4	207.3	84.3	139.1

Profits earned by Alberta's Investment in the Syncrude Project

Profit for the years ended March 31 – $M

	ANNUAL PROFIT	CUMULATIVE PROFIT
1980	(4.4)	(4.4)
1981	27.3	22.9
1982	26.9	49.8
1983	68.7	118.5
1984	61.5	180.0
1985	86.5	266.5
1986	72.0	338.5
1987	33.6	372.1
1988	44.1	416.2
1989	(3.1)	413.1
1990	22.5	435.6

Book Value of Alberta's Investment in the Syncrude Project

at March 31 – $M

	$M
1980	179
1981	184
1982	439
1983	411
1984	443
1985	439
1986	459
1987	483
1988	509
1989	512
1990	519

11 OSLO Commercial Project

The OSLO Commercial Project is a proposed commercial oil sands plant with a mine site and extraction plant to be located on Lease 31, 60 kilometres north of Fort McMurray and an upgrading facility to be situated north of Edmonton near Redwater. The two components of the Project will be linked by parallel pipelines — one line will carry a mixture of bitumen and diluent (a thinning agent) to the upgrader and the other will return the diluent to Lease 31.

Alberta's two existing oil sands mining plants, Syncrude and Suncor, currently produce approximately 15% of Canada's daily oil demand. With the development of OSLO, Alberta will have the daily capacity to meet more than 20% of Canada's demand requirements. At full production, of 30 million barrels of oil a year, OSLO will produce enough synthetic crude oil to significantly offset the current rate of decline in the conventional Canadian oil industry.

OSLO Commercial Project Ownership

PanCanadian Petroleum Limited	10%
Canadian Occidental Petroleum Ltd.	20%
Esso Resources Canada Limited	25%

The owners bring considerable knowledge and expertise gained from their experience in constructing and operating the Syncrude Project. OSLO Alberta Limited, a wholly-owned subsidiary of Esso Resources, is the operator of the Project.

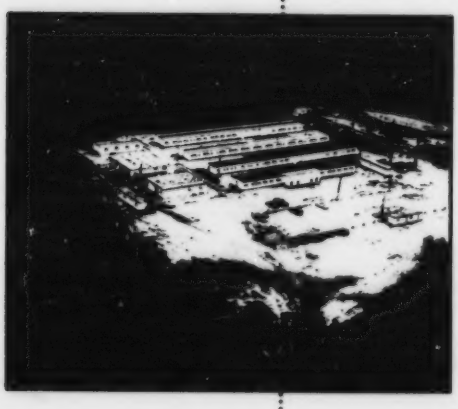
The Alberta Heritage Savings Trust Fund investment in the OSLO Commercial Project, which commenced in the 1989-90 fiscal year, stood at $4 million at March 31, 1990.

Current operational plans call for OSLO to have a production capacity of 80,000 barrels per day of synthetic crude oil with plant start-up set for 1996-1997. Initial capital costs are estimated at approximately $4.5 billion.

Agreements have been concluded between the OSLO owners and the Governments of Canada and Alberta to provide financial assistance during the engineering study phase of the Project. Alberta has agreed to provide up to $46.8 million or 36% of the estimated $130 million total cost of the engineering phase. Canada will contribute $45.5 million or 35% of the total. The OSLO owners will provide the remainder. Negotiations on fiscal terms for the construction and operation phases of the Project are continuing between Alberta and the OSLO

owners. The engineering phase is expected to be complete by the end of 1991 and a final decision on construction is expected in the spring of 1992.

Projections for OSLO indicate that during its construction phase, the Project will generate a peak of close to 6,000 direct jobs or an estimated 18,000 work years of employment. In addition, the Project will spend approximately $320 million annually in ongoing capital and operating costs. Some 1,800 direct and contract operating positions will be created by the operation of the OSLO mine and extraction plant and upgrading facility.



The OSLO Commercial Project will involve the use of conventional open pit truck and shovel surface mining techniques to strip the overburden and mine the oil sands. Bitumen is separated from the sands by an improved hot water extraction process. The bitumen is then diluted and transported via pipeline to the upgrader at Redwater.

State-of-the-art hydrogen addition technology will be used at the Redwater site where the upgrader will convert the bitumen into high quality synthetic crude oil suitable as feedstock for conventional refineries. The Redwater plant represents an advance for the industry as it provides more flexibility to both the bitumen producing and consuming segments of the operation and it also spreads the benefit of the project across the province.

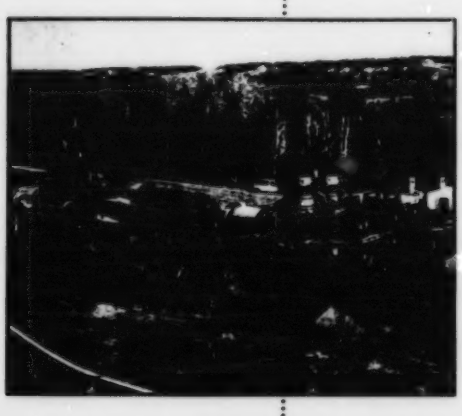
The combined operating costs of the two OSLO plant locations are estimated to be about 30% lower than those of current facilities.

OSLO is committed to minimizing its impact on the environment and the Project will meet or exceed all environmental regulations and guidelines. Environmental considerations are fundamental elements in the design proccess. An extensive environmental baseline program has been employed by the Project to gather all data required for the environmental impact assessment and for the program to minimize impacts on the environment.

A communications program involving local governments, local residents, and others is in place and the public has had an opportunity to provide input to the Project through open houses and information sessions. A Fort McMurray Information Office and a full-time community liaison worker are available to answer questions and provide information about the Project.

The OSLO Commercial Project is a development which, if it proceeds, will make a meaningful contribution to Alberta's economic well-being.

13 OSLO New Ventures Project



In 1989, the OSLO Project was split into two separate programs. One section consists of the Commercial Project — the northern portion (mine and extraction plant) of Lease 31 and the upgrader at Redwater. The second section, now called the OSLO New Ventures Project, will handle the exploration and development of the remaining five oil sands leases plus the southern portion of Lease 31. Alberta's 10% equity participation in both programs is managed by Alberta Oil Sands Equity.

The New Ventures mandate is directed toward development and testing of new technologies for bitumen recovery that have the potential to significantly reduce operating costs. Currently, New Ventures is focussing on a dredging process, a borehole mining process and both cold and hot water extraction processes. The owners, along with Suncor and Alberta Oil Sands Technology and Research Authority (AOSTRA), are currently considering a commercial demonstration project for the dredging and cold water extraction processes. The project construction should begin in 1992 and be operational in 1993. It is designed to produce approximately 7,000 barrels per day of bitumen from reserves located adjacent to the Suncor oil sands plant.

The OSLO New Ventures group invented the OSLO Cold Water Extraction Process (OCWE) in 1986. During 1989, the process was field tested using a large scale pilot in a continuous mode. Work to date has indicated that the process has the following advantages: it is superior to the Clark Hot Water Process used at Syncrude and Suncor; it reduces capital and operating costs by some 30%; it promotes environmentally superior tailings management as it produces sludge that is more amenable to solidification; it gives high recovery on high clay content ore; it has potential application to Syncrude and OSLO Commercial Projects; and it may be easily utilized in small commercial projects.

Lloydminster Bi-Provincial Upgrader

The Government of Alberta is a participant in a joint venture with Husky Oil and the Governments of Canada and Saskatchewan in the construction, ownership, and operation of a heavy oil upgrader at Lloydminster. The upgrader, currently under construction, is expected to be completed in November, 1992. Engineering work will be completed by March, 1991.

The Alberta Heritage Savings Trust Fund investment in the Project to March 31, 1990 was $29.8 million.

The Lloydminster Bi-Provincial Upgrader will increase the value of heavy crude oil and thereby increase its demand. Heavy crude oil contains a high proportion of heavy hydrocarbons as well as large amounts of contaminants, such as sulphur and heavy metallic compounds. If used as feedstock to a conventional refinery, these crude oils result in excessive production of low-value, high-sulphur content industrial fuels, or asphalts. In order to produce gasoline and the other high-value, light products, refiners would have to invest in expensive conversion equipment. The upgrader will take 40,000 barrels per day of heavy crude oils from the Lloydminster and Cold Lake regions and convert them into a high-value, synthetic crude oil which can be used by conventional refiners to make gasoline and the other light products. The diluent required to get the heavy crude oil to the upgrader will be recovered and recycled to the field for reuse.

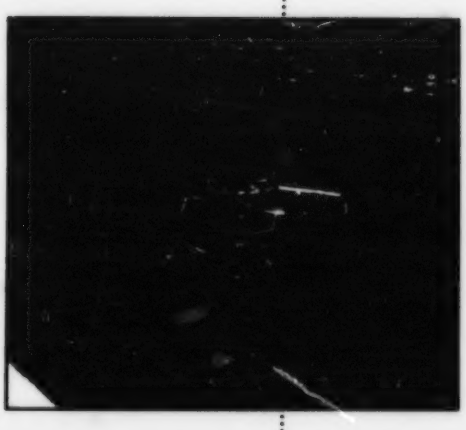
Lloydminster Bi-Provincial Upgrader Ownership

Alberta Oil Sands Equity	24.17%
Husky Oil Operations Limited	26.67%

Upgrading will be accomplished in several stages. The first step is fractionation in which the heavy crude oil blend, which includes the diluent, is separated into the diluent and other distillate products. The next step involves the conversion of the residual stream into lighter hydrocarbon products in an ebullated bed hydrocracker. The remaining heavy, unconverted residue produced is thermally cracked in a conventional delayed coking unit to produce additional light products as well as about 400 tons per day of low-sulphur coke byproduct suitable for use as an industrial fuel. The light products will be treated in two

hydrotreater processes in order to stabilize the products and remove the remaining sulphur and nitrogen contaminants.

The initial cost estimate of the upgrader is $1.27 billion which includes an initial investment of $100 million by Husky Oil. The Project is managed by a Joint Venture Board which consists of three representatives of each owner. The Alberta Government representatives on the Joint Venture Board are Thomas R. Vant, Lloyd W. McLaren, and Ed Jenson. Husky, the Project's construction manager, will also operate the upgrader upon its completion.



Construction of the upgrader is expected to create 5,800 direct person-years of employment and the operations phase will create 300 permanent jobs at the upgrader and a further 1,500 jobs at the crude oil recovery sites. As of August, 1990, there were 2,000 construction workers employed at the site.

A further beneficiary of the Lloydminster Bi-Provincial Upgrader Project will be Lakeland College at Lloydminster, Alberta. A 750-bed accommodation facility to house some of the workers during the construction phase was completed and officially opened in October, 1990. Once the upgrader is finished, the accommodation will be used for student housing at Lakeland College.